

In the Claims:

Please amend the claims as follows:

1. (currently amended) A system that enables a user to interact with a virtual control panel for controlling a device, the system comprising:

a pointing object carried and manipulated by the user for interacting with the virtual control panel to control a device,

a first tracking unit adapted to capture data representing a position of the pointing object,  
a portable identification element carried and manipulated by the user, the portable identification element being configured to define a position and orientation of the virtual control panel,

a second tracking unit adapted to capture data representing a position of the portable identification element,

a storage unit configured to store at least one pre-defined graphical interface representing a control panel of the device, ~~said graphical interface comprising an interface for user interactions with the device,~~

a graphics unit configured to generate a graphical representation of the control panel based on said stored graphical interface,

a registering unit configured to register said graphical representation of the control panel in a fixed relation to said portable identification element, based on said data representing the position of the portable identification element, to produce ~~a virtual~~ the virtual control panel,

a display unit configured to show the user a view comprising the real world and the

virtual control panel projected in a fixed relation to said portable identification element, and  
an application unit configured to perform actions to control the device in response to the  
~~users~~ interactions of the user with the virtual control panel, and configured to determine which  
actions to control the device ~~to be performed~~ perform based on the position of said user  
controlled pointing object in relation to the identification element.

2. (previously amended) The system according to claim 1, wherein the system is  
adapted to modify the appearance of the virtual control panel in response to interactions between  
the user controlled pointing object and the virtual control panel.

3. (previously amended) The system according to claim 1, wherein said graphical  
interface is adapted to display data from the device and wherein the system is adapted to generate  
a graphical representation of the data and to display the data on the virtual control panel.

4. (previously amended) The system according to claim 1, wherein said user controlled  
pointing object is a handheld pointing device or a part a body of the user.

5. (previously amended) The system according to claim 1, wherein the storage unit is  
adapted to store a plurality of graphical interfaces, each representing a control panel of a  
particular device, wherein the system is adapted to generate and display a plurality of graphical  
representations of control panels for different devices based on said stored graphical interfaces of  
the devices, and wherein the system further comprises:

an identification unit configured to identify which of the stored control panels to be

displayed.

6. (previously amended) The system according to claim 5, wherein said identification unit comprises a recognition unit configured to recognize and identify devices in the environment of the user, and wherein the system is adapted to determine which of the stored control panels to be displayed based on which of the devices is identified.

7. (previously amended) The system according to claim 6, wherein said recognition unit is adapted to recognize and identify unique identification markings on the devices.

8. (previously amended) The system according to claim 5, wherein the system is arranged so the virtual control panel displayed changes when another device is recognized and identified, and when the user has accepted the other device.

9. (previously amended) The system according to claim 1, wherein said portable identification element is adapted to be carried by the user during interaction with the virtual control panel.

10. (previously amended) The system according to claim 1, wherein said portable identification element is attachable to a body of the user.

11. (previously amended) The system according to claim 1, wherein said display unit comprises a wearable display device showing the user said view.

12. (currently amended) A method that enables a user to interact with a virtual control panel for controlling a device using a user controlled pointing object, the method comprising:

- receiving data representing a position of the user controlled pointing object,
- receiving data representing a position of a portable identification element carried and manipulated by the user,
- storing at least one pre-defined graphical interface representing a control panel ~~of a~~ of ~~the~~ device,
- generating a graphical representation of the control panel of the device based on said pre-defined graphical interface,
- registering said graphical representation of the control panel in a fixed relation to said portable identification element, based on said data representing the position of the identification element, to produce ~~a virtual~~ the virtual control panel in a position and orientation defined by the user with the portable identification unit,
- displaying a view comprising the real world and the virtual control panel projected in a fixed relation to said portable identification element, and
- performing actions to control the device in response to the ~~users~~ interactions of the user with the virtual control panel, wherein the actions to control the device to be performed is determined based on the position of said user controlled pointing object in relation to the position of the virtual control panel.

13. (previously amended) The method according to claim 12, further comprising:

- modifying the appearance of the virtual control panel in response to interactions between

the user controlled pointing object and the virtual control panel.

14. (previously amended) The method according to claim 12, further comprising:  
defining a two-way communication between the virtual control panel and the device,  
sending information to the device regarding the users actions with the virtual control  
panel,  
receiving data from the device, generating a graphical representation of the received data  
and  
displaying the data on the virtual control panel.

15. (previously amended) The method according to claim 14, wherein said data is  
displayed on the virtual control panel in response to interactions between the user controlled  
pointing object and the virtual control panel.

16. (previously amended) The method according to claim 12, further comprising:  
storing a plurality of pre-defined graphical interfaces, each representing a control panel of  
a particular device,  
determining which of the stored control panels to be displayed, and  
generating a graphical representation of the control panel to be displayed based on the  
pre-defined graphical interface of the control panel to be displayed.

17. (previously amended) The method according to claim 12, wherein at least one of the  
stored graphical interfaces comprises more than one graphical view to be displayed on the virtual

control panel, and which of the views to be displayed is determined based upon actions of the user.

18. (previously amended) The method according to claim 16, further comprising:  
recognizing and identifying a device,  
determining which of the stored control panels to be displayed based on the identified device, and  
generating graphical representation of the control panel of the identified device based on the stored graphical interface of the identified device and displaying a view comprising the real world and the virtual control panel of the identified device projected in a fixed relation to said portable identification element.

19. (previously amended) The method according to claim 18, wherein each device is provided with a unique identification marking and a device is recognized by identifying ~~its~~ the unique identification marking.

20. (previously amended) The method according to claim 18, wherein the virtual control panel displayed is changed when another device is recognized and identified, and when the user has accepted the device.

21. (previously amended) The method according to claim 12, wherein said portable identification element is carried by the user during interaction with the virtual control panel.

22. (previously amended) The method according to claim 12, wherein the virtual control panel comprises virtual interaction members and an audio and/or visual feedback is generated when the user activates any of the virtual interaction members.

23. (currently amended) A computer program product, comprising:  
a non-transitory computer readable medium; and  
program instructions recorded on the computer readable medium which, when loaded into a computer, causes the computer to perform the steps of  
receiving data representing a position of the user controlled pointing object,  
receiving data representing a position of a portable identification element carried and manipulated by the user,  
storing at least one pre-defined graphical interface representing a control panel ~~of a~~ of  
the device,  
generating a graphical representation of the control panel of the device based on said pre-defined graphical interface,  
registering said graphical representation of the control panel in a fixed relation to said portable identification element, based on said data representing the position of the identification element, to produce ~~a virtual~~ the virtual control panel in a position and orientation defined by the user with the portable identification unit,  
displaying a view comprising the real world and the virtual control panel projected in a fixed relation to said portable identification element, and  
performing actions to control the device in response to the ~~users~~ interactions of the user with the virtual control panel, wherein the actions to control the device to be performed is

determined based on the position of said user controlled pointing object in relation to the position of the virtual control panel.

24. (cancelled)